Listing of the Claims

1. (Currently Amended) A fuel transport tube having improved fuel vapor permeation, said tube comprising:

an inner conductive nylon tubular structure having an inner surface and an outer surface, wherein said inner conductive nylon tubular structure includes a conductive agent in the form of carbon fibers or carbon fibrils;

an aluminum barrier layer having an inner surface and an outer surface disposed on the outer surface of said inner nylon tubular structure; and

a non-conductive thermoplastic tubular structure having an inner surface and an outer surface disposed on the outer surface of said aluminum layer, wherein said non-conductive thermoplastic tubular structure is selected from the group consisting of chlorinated polyethylene; chlorosulfonated polyethylene; styrene-butadiene rubber; butadiene-nitrile rubber; nitrile-polyvinyl chloride; EPDM, neoprene; vinylethylene-acrylic rubber; acrylic rubber; epichlorohydrin rubber; copolymers of epichlorohydrin and ethylene oxide; polychloroprene rubber; polyvinyl chloride; ethylene-propylene copolymers; ultra high molecular weight polyethylene; chlorobutyl rubber; and blends thereof.

2. (Original) The tube of claim 1, wherein said inner conductive nylon tubular structure has a thickness of about 0.2 to 2.0 mm.

3. (Original) The tube of claim 1, wherein said inner conductive nylon tubular structure has a thickness of about 0.2 to 1.5 mm.

4. (Original) The tube of claim 1, wherein said inner conductive nylon tubular structure is formed from nylon 4, nylon 6, nylon 66, nylon 610, nylon 9, nylon 11 or nylon 12.

5. (Original) The tube of claim 4, wherein said inner conductive nylon tubular structure is

formed from nylon-12.

6. (Original) The tube of claim 1, wherein said carbon fibers or said carbon fibrils are present in an amount of about 2 to 20 weight percent.

7. (Original) The tube of claim 1, wherein said aluminum barrier layer has a thickness of about 0.02 to 1.5mm.

8. (Original) The tube of claim 1, wherein said aluminum barrier is applied to said outer surface of said inner conductive nylon tubular structure by helical wrapping or by tensional radial curling.

9. (Original) The tube of claim 1, wherein said outer non-conductive thermoplastic tubular structure has a wall thickness of about 0.25 to 1.5 mm.

10. (Original) The tube of claim 1, wherein said outer non-conductive thermoplastic tubular structure is disposed on the outer surface said aluminum barrier layer.

11-13 (Canceled)

14. (Original) The tube of claim 1, further comprising a tie layer disposed between the outer surface of said conductive inner nylon tubular structure and the inner surface of said aluminum barrier layer.

15. (Original) The tube of claim 14, wherein said tie layer is an anhydride-modified linear low
density polyethylene.

16. (Original) The tube of claim 1, further comprising a tie layer disposed between the outer surface of said aluminum barrier layer and the inner surface of said non-conductive

thermoplastic tubular structure.

17. (Original) The tube of claim 16, wherein said tie layer is an anhydride-modified linear low density polyethylene.

18. (Original) A fuel transport tube having improved fuel vapor permeation, said hose comprising in order:

an inner conductive nylon 12 tubular structure containing about 2 to 20% of a conductive agent selected from the group consisting of carbon fibers and carbon fibrils, said inner conductive nylon 12 tubular structure having a thickness of about 0.2 to 1.5 mm;

a first anhydride-modified linear low density polyethylene tie layer;

an aluminum barrier layer having an inner surface and an outer surface, said aluminum having a thickness of about 0.02 to 1.5 mm;

a second anhydride-modified linear low density polyethylene tie layer; and

an outer non-conductive ~~outer nylon 12~~ tubular structure selected from the group consisting of chlorinated polyethylene; chlorosulfonated polyethylene; styrene-butadiene rubber; butadiene-nitrile rubber; nitrile-polyvinyl chloride; EPDM, neoprene; vinylethylene-acrylic rubber; acrylic rubber; epichlorohydrin rubber; copolymers of epichlorohydrin and ethylene oxide; polychloroprene rubber; polyvinyl chloride; ethylene-propylene copolymers; ultra high molecular weight polyethylene; chlorobutyl rubber; and blends thereof, said non-conductive outer nylon 12 tubular structure having a thickness of about 0.25 to 1.5 mm.

19. (Original) A method of making a flexible fuel transfer tube having an improved fuel vapor permeation, said method comprising the steps of:

providing an inner conductive nylon tubular structure having a conductive inner surface and an outer surface, said inner conductive nylon tubular structure containing a conductive agent selected from the group consisting of carbon fibers and carbon fibrils;

applying a thin aluminum barrier layer on the outer surface of said inner conductive nylon tubular structure, said aluminum barrier layer having an inner surface and an outer surface; and

applying an outer non-conductive thermoplastic layer on the outer surface of said aluminum layer, wherein said non-conductive thermoplastic layer is selected from the group consisting of chlorinated polyethylene; chlorosulfonated polyethylene; styrene-butadiene rubber; butadiene-nitrile rubber; nitrile-polyvinyl chloride; EPDM, neoprene; vinylethylene-acrylic rubber; acrylic rubber; epichlorohydrin rubber; copolymers of epichlorohydrin and ethylene oxide; polychloroprene rubber; polyvinyl chloride; ethylene-propylene copolymers; ultra high molecular weight polyethylene; chlorobutyl rubber; and blends thereof.

20. (Original) The method of claim 19, wherein said inner conductive nylon tubular structure has a wall thickness of about 0.2 to 1.5 mm.

21. (Original) The method of claim 20, wherein said inner conductive nylon tubular structure is formed from nylon 4, nylon 6, nylon 66, nylon 610, nylon 9, nylon11 or nylon 12.

22. (Original) The method of claim 21, wherein said inner conductive nylon tubular structure is formed from nylon 12.

23. (Original) The method of claim 19, wherein said conductive agent is added in an amount of about 2 to 20 weight percent.

24. (Original) The method of claim 19, wherein said aluminum barrier layer has a thickness of about 0.02 to 1.5 mm.

25. (Original) The method of claim 19, wherein said aluminum barrier layer is applied to the outer surface of said inner conductive nylon tubular structure by helical wrapping or by tensional radial curling.

26-28 (Canceled)

29. (Original) The method of claim 19, wherein said non-conductive thermoplastic layer

has a wall thickness of about 0.25 to 1.5 mm.

30. (Original) The method of claim 19, further comprising the step of applying a protective cover around said tube.

31. (Original) The method of claim 30, wherein said protective cover is constructed of chlorinated polyethylene (CPE), nylon, nylon-PVC, EPDM, neoprene, hypalon, chlorobutyl styrene-butadiene rubber (SBR), butadiene-nitrile rubber, chlorosulfonated polyethylene, vinyl ethylene-acrylic rubber, acrylic rubber, epichlorohydrin rubber, polychloroprene rubber, polyvinyl chloride (PVC), ethylene-propylene copolymers, high density polyethylene, and ultra high molecular weight polyethylene.

32. ~~36.~~ (Original) The method of claim 19, further comprising the steps of applying a first tie between the outer surface of said inner conductive nylon tubular structure and the inner surface of said aluminum barrier layer, and applying a second tie layer between the outer surface of said aluminum barrier layer and the inner surface of said outer non-conductive thermoplastic tubular structure.

33. ~~37.~~ (Original) The method of claim 36, wherein each of said first tie layer and said second tie layer is an anhydride-modified linear low density polyethylene.

34. ~~38.~~ (Canceled)